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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,746	12/23/2004	Francois Quetel	Q83748	4368
23373	7590	05/13/2009	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			DOE, SHANTA G	
ART UNIT	PAPER NUMBER		1797	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/509,746	<b>Applicant(s)</b> QUETEL ET AL.
	<b>Examiner</b> SHANTA G. DOE	<b>Art Unit</b> 1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 21 January 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,3-5,7 and 8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,3-5,7 and 8 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 30 September 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed 1/21/2009 has been acknowledged and entered by the examiner.

### ***Response to Arguments***

2. Applicant's arguments filed on 1/21/2009 have been fully considered but they are not persuasive. The applicant's argument that Swank reference does not disclose that a decontaminating liquid fog atmosphere is continuously sprayed in chamber 28 was not found persuasive because as indicated the previous office action dated 9/17/2008 (see page 2 and 3 and the rejection of claim 1) the Swank reference does disclose that a decontaminating liquid is continuously sprayed in chamber 28 so as to maintain a fog atmosphere (the partially formed materials pass first through an upstream chamber (sterilization chamber (28)) into which hydrogen peroxide is sprayed (liquid hydrogen peroxide is vaporized at 175 degrees in the presence of air/air is saturated with hydrogen peroxide vapor the mixture exits the spray nozzle at 80 - 90 degrees and it is known that air saturated with H<sub>2</sub>O<sub>2</sub> vapor forms condensation droplets of H<sub>2</sub>O<sub>2</sub> in air (mist or fog) when temperature decreases) continuously so as to maintain in this chamber a fog atmosphere and additionally at col. 4 line 40-44 Swank states that the applicator is a continuous flow applicator). Additionally, the applicant's argument that the Swank reference fails to mention "perform" was not found persuasive because even though the Swank reference does not use the exact term "perform", the reference does mention

partially formed container. It is well known that a preform is a partially formed container. The applicant's argument that the Swank reference discloses decontaminating the entire partially formed container including the neck and that such a teaching is contrary to the applicant's invention as is claimed in claim 1 because claim 1 states that only the neck is treated was not found persuasive. The above argument was not found persuasive because the applicant did not claim in claim 1 that only the necks of the preform are treated. Furthermore, it is unclear to the examiner how only the necks of the preform can be treated inside a chamber where a decontaminating liquid fog atmosphere is maintained if the entire preform is in the chamber. (the examiner is not sure about how/what is going to prevent the decontaminating fog from contacting the other parts of the preform?) (from the drawing it seems that the entire perform is passed through the sterilizing chamber). The applicant's argument that the claims as amended are allowable over the prior was not found persuasive, see art rejection below.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4, 5, 7, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, this claim is indefinite because it contains the language "... has such a length". The examiner is unsure about what length/lengths exactly "such a length" encompasses.

5. Regarding claim 4, it recites the limitation " ... along a given patch" . The examiner is unsure what exactly the "...given patch" is and how the "given patch" relates to the applicant's invention of a decontaminating installation. The examiner for examination purposes the examiner interprets "given patch" to be/mean "given path".

6. Claims 4, 5 & 8 recite the limitation "said chamber". There is insufficient antecedent basis for this limitation in the claims.

7. Claims 4, 5 &7 recite the limitation "said path". There is insufficient antecedent basis for this limitation in the claims.

#### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
11. Claims 1 & 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (APA) in view of Swank et al (US 6,183,691).

Regarding claim 1, the applicant admits that it is a known practice in the manufacture of decontaminated containers out of thermoplastic by blow molding or stretch-blow molding, to decontaminate the preforms (preforms are made by molding them with their necks in the final shape and having final dimensions) rather than finished container and also that it was known to use UV radiation and/hydrogen peroxide (in liquid or atomized form) to decontaminate these preforms (partially formed container or materials) (see applicant's specification page 1 line 1 - page 3 line 20). The applicant does not disclose that there is known method comprising, passing said preforms one after the other

through an upstream chamber inside which a decontaminating liquid is sprayed continuously towards necks of said performs so as to wet inside and outside surfaces of the necks and in such a manner that a fog atmosphere of said decontaminating liquid is maintained inside said chamber so that said necks are bathed in said fog of decontaminating liquid, and passing said necks of said performs wetted by said decontaminating liquid in front of ultraviolet lamps arranged so as to irradiate said necks for at least a minimum predetermined period of time.

However, Swank ('691) discloses a method for decontaminating/sterilizing partially formed material (20), wherein, as the partially formed material are fed one after the other into a container manufacturing unit along a given path ( see arrow in fig 1A), the partially formed materials pass first through an upstream chamber (sterilization chamber (28)) into which hydrogen peroxide is sprayed (liquid hydrogen peroxide is vaporized at 175 degrees in the presence of air/air is saturated with hydrogen per oxide vapor the mixture exits the spray nozzle at 80 - 90 degrees and it is known that air saturated with  $H_2O_2$  vapor forms condensation droplet of  $H_2O_2$  in air (mist or fog) when temperature decreases) continuously so as to maintain in this chamber a fog atmosphere of said decontaminating product with which the necks of the preforms are brought into contact wherein both the inside and out side surfaces of the necks are wetted by said decontaminating product said fog of decontaminating liquid being caused to flow through said chamber, and then the preforms pass in front of ultraviolet lamps arranged so as to completely irradiate the necks of the partially formed materials

wetted by the decontaminating product for at least a minimum predetermined period of time, before reaching a device that loads them into the manufacturing unit (see Swank ('691) abs; fig. 1A, 2; col. 4 lines 40 - 65; col. 5 lines 30-40 and col. 6 lines 47 - 63).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the decontaminating procedure taught by Swank in the known manufacturing practice as admitted by applicant since Swank discloses that it was known in the art to use such procedure to decontaminate partially formed container/material (preforms) and stated at col. 4 lines 60 - 65 that such a modification provides for a synergistic sterilization effect between the UV radiation and hydrogen peroxide.

Regarding claim 3, the combined references disclose the method as claimed in claim 1 wherein the decontaminating product is hydrogen peroxide  $H_2O_2$  (see Swank abs)

9. Claims 4, 5 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marchau et al (WO 99/03667) in view of admitted prior art, Swank et al (US 6,183,691) and Kuwata et al (JP 06-171697).

Regarding 4, Marchau discloses an installation (system) for the decontamination while they are moving of the necks of preforms (3) delivered one after the other to a loading device (see fig 1), said preforms being made of thermoplastic and being intended for making into containers (e.g. bottle (110)) by blow molding or stretch-blow molding, said

decontamination installation being structurally and functionally connected to a preform feeder installation (2) comprising means for moving the preforms one after the other; the decontamination installation contains a means of spraying (sprayer 45) the preform with hydrogen peroxide to and lamps(104) decontaminate said perform (Marchau (WO 99/03667 fig 1 page 3 paragraph 5; page 5 paragraph 2; page 6 paragraph 8; page 7 paragraph 1-4; page 11 paragraph 2). However Marchau does not disclose an installation for decontaminating preforms wherein said decontamination installation comprising ultraviolet lamps arranged so that the ultraviolet radiation completely irradiates the necks of the moving preforms, wherein the decontamination installation also includes, upstream of the ultraviolet lamps, a chamber traversed by said preforms movement means of the feeder installation and in which means are provided for spraying (sprayer 45 above the preforms movement means) a decontaminating product continuously towards necks of said perform so as to wet inside and outside surfaces of the necks and so as to maintain a fog of the decontaminating product inside said chamber. Additionally, Marchau fails to disclose that a suction means is connected to the decontamination chamber.

Swank ('691) discloses a decontaminating/sterilizing system (installation) for partially formed material (20), wherein, as the partially formed material are fed one after the other into a container manufacturing unit, the partially formed materials pass first through an upstream chamber (sterilization chamber (28)) into which hydrogen peroxide is sprayed (liquid hydrogen peroxide is vaporized at 175 degrees in the presence of air/air is saturated with hydrogen peroxide vapor the mixture exits the spray nozzle at

80 - 90 degrees and it is known that air saturated with H<sub>2</sub>O<sub>2</sub> vapor forms condensation droplet of H<sub>2</sub>O<sub>2</sub> in air(mist or fog) when temperature decreases) continuously towards necks of said preforms so as to maintain in this chamber a fog atmosphere of said decontaminating product with which the necks of the preforms are brought into contact, and then passes wetted necks in front of ultraviolet lamps arranged so as to completely irradiate the necks of the partially formed materials wetted by the decontaminating product for at least a minimum predetermined period of time, before reaching a device that loads them into the manufacturing unit (see Swank ('691) abs; fig. 2; col. 4 lines 40 - 65; col. 5 lines 30-40 and col. 6 lines 47 - 63).

Kuwata et al. (JP 06-171697) discloses sterilization or decontaminating room/enclosure with a suction means connected to the enclosure in order discharge/remove air from the enclosure (see Kuwata abs).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the decontamination installation of Marchau with the decontamination system taught by Swank since Swank disclosed that it was known in the art at the time the invention was made to use such an installation to decontaminate partially formed containers in a fabrication process stated at col. 4 lines 60 - 65 that such a modification provides for a synergistic sterilization effect between the UV radiation and hydrogen peroxide.

Furthermore, in view Kuwata et al., it would have been obvious to one having ordinary skill in the art at the time of the invention to have the combination above further comprise a suction means connected to the decontamination chamber/enclosure as

taught by Kuwata because as stated by Kuwata such a modification would allow air from the enclosure to be removed thereby removing spent decontaminating fog.

Regarding claims 5, the combined references disclose the installation as claimed in claim 4, wherein there is a sprayer which aims roughly in the direction of the necks of the moving preforms (see fig 1). However the combination does not disclose the installation of claim 4 wherein the spray means comprise at least two spray nozzles arranged one on either side of the preforms movement means and above these, with their respective axes aimed roughly in the direction of the necks of the moving preforms.

However, the applicant admits that it is conventional to place the neck of each preform under a decontaminant source to decontaminate the neck of preform wherein the decontaminant source is distributed on either side of the perform movement means (see applicant's specification page 2 lines 5 -line 20).

Swank ('691) discloses a decontamination installation comprising applicators / sprayers (30A and 30B) which may be nozzles for spraying hydrogen peroxide (see Swank col. 6 lines 47 - 63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the sprayers of the hydrogen peroxide (decontaminant source) of the combined references be arranged one on either side of the preform movement means and above these, since it was conventional to do so as admitted by the applicant.

Further more it would have been obvious to use a nozzle as the spraying means since it is well known in the art to use nozzle as a spraying means.

Regarding claim 8, the combined references disclose the installation as claimed in claims 4. The combination does not disclose the installation of claim 4 wherein the preform movement means comprises an inclined slideway (slide guide) down which the preforms slide by gravity one after the other and that this slideway passes through the chamber.

However, the applicant admits that it is known in the art to use a preform movement means comprising an inclined slideway (slide guide) down which the preforms slide by gravity one after the other in a decontamination installation in that this slideway passes through the chamber(see applicant's specification page 2 lines 5 - line 20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the feeding means taught in the admitted prior art since it was known in the art at the time as a conventional preform movement means.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANTA G. DOE whose telephone number is (571)270-3152. The examiner can normally be reached on Mon-Fri 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GSD

/Walter D. Griffin/  
Supervisory Patent Examiner, Art Unit 1797